

PRODUCTION OF HIGH-PURITY MALTOSE**Publication number:** JP2119789 (A)**Publication date:** 1990-05-07**Inventor(s):** NIIMI MASAHIRO; HARIO YUKARI; KATAURA KOICHI; ISHII YOSHIFUMI; KATO KAZUAKI**Applicant(s):** TOWA KASEI KOGYO KK**Classification:**

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Abstract of JP 2119789 (A)

PURPOSE: To readily, industrially and advantageously obtain the subject compound even from economically advantageous terrestrial starch by saccharifying a gelatinized starch with a general-purpose enzyme and then saccharifying the resultant product with a special enzyme produced by genetic recombination under specific conditions.

CONSTITUTION: An aqueous solution of starch in 5-15wt.% concentration is initially thermally gelatinized and the resultant gelatinization product is then saccharified with two or more enzymes selected from beta-amylase, pullulanase and isoamylase.; Maltogenic-alpha-amylase produced by integrating a plasmid having a part coding maltogenic-alpha-amylase which is a gene of *Bacillus.stearothermophilus* fitted therein into *Bacillus.subtilis* is then added thereto at a time of 1-24hr after starting the saccharification to continue the saccharification for 10-48hr from the start thereof. After completing the saccharification, pH is regulated to ≤ 4.5 to remove water-insoluble components. Dextrin in the solution is subsequently hydrolyzed with a liquefying enzyme and then purified to afford a saccharide liquid containing 94.5wt.% maltose based on solid substances.

